



ANNUAL WATER QUALITY REPORT

Reporting Year 2022

Presented By
**City of Girard
Water Department**

PWS ID#: OH7801103



Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education, while continuing to serve the needs of all our water users. Please remember that we are always available should you ever have any questions or concerns about your water.

Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit <https://bit.ly/3IeRyXy>.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Where Does My Water Come From?

The City of Girard Water Department is part of the Mahoning Valley Sanitary District (MVSD). We are a satellite distribution system, meaning we do not treat our own water but instead purchase it from other public water sources. The City of Girard purchases water from Niles, Trumbull County, Youngstown, and McDonald. All these water systems are part of MVSD, which draws its water from the Meander Creek Reservoir.



Important Health Information

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Howard Zickefoose, Water Department Superintendent, at (330) 545-4208.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Source Water Information

Information contained in this report pertains to water produced by the Mahoning Valley Sanitary District (MVSD or District) at its treatment facilities located at Mineral Ridge, Ohio.

The Mahoning Valley Sanitary Public Water Supply ID numbers PWS 7801811. The Source of the water is Meander Creek reservoir, a Surface water supply with a capacity of 11 billion gallons is owned and operated by the Mahoning Valley Sanitary District.

The MVSD also has an agreement with the United States Army Corp of Engineers that permits MVSD to draw water from Berlin Lake as a secondary source. The MVSD maintains a raw water pump station at this location and transmission lines to provide raw water to the Meander Creek Reservoir. The District did not use any water from this secondary raw water source.

The Mahoning Valley Sanitary District public water system uses surface water drawn from the Meander Creek Reservoir. For the purposes of source water assessments. In Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at the public drinking water intake with little warning or time to prepare.

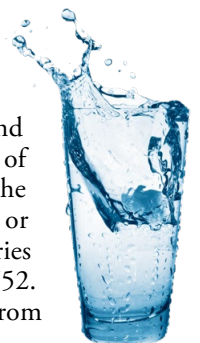
The Mahoning Valley Sanitary District public water source protection area is susceptible to runoff from crop agriculture and animal feedlot operations, oil, and gas wells, failing home and commercial septic systems, road/rail crossings, and new housing and commercial development that could increase runoff from roads and parking lots.

The Mahoning Valley Sanitary District water system treats the water to meet drinking water quality standards, but no single treatment techniques can address all potential contaminants. The potential for water quality impacts can further be decreased by implementing measures to protect Meander Creek Reservoir and its watershed. More detailed information is provided in the Mahoning Valley Sanitary District's Drinking Water Source Assessment report, which can be obtained by calling Johnathan Jamison (330) 652-3614.

To view the approved MVSD Meander Creek Reservoir Drinking Water Source Protection Plan, visit meander.org and look under the link for District information, Water Quality.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. A list of laboratories certified in the State of Ohio to test for lead may be found at www.epa.ohio.gov/ddagw or by calling (614) 644-2752. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

Note that we have a current, unconditioned license to operate our water system.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

| REGULATED SUBSTANCES | | | | | | | |
|---|-----------------|------------------------------------|-----------------|--------------------|-------------------|-----------|---|
| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
| Asbestos (MFL) | 2022 | 7 | 7 | AA < 0.062 | NA | No | Decay of asbestos cement water mains; Erosion of natural deposits |
| Chlorine (ppm) | 2022 | [4] | [4] | 1.7658 | 1.54–1.99 | No | Water additive used to control microbes |
| Fluoride (ppm) | 2022 | 4 | 4 | 1.02 | 0.86–1.24 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Haloacetic Acids [HAAs]–Stage 2 (ppb) | 2022 | 60 | NA | 28.7 | 17.9–36.5 | No | By-product of drinking water disinfection |
| Nitrate (ppm) | 2022 | 10 | 10 | 0.24 | <0.10–0.44 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Total Organic Carbon [TOC] (ppm) | 2022 | TT ¹ | NA | 1.62 | 1.62–1.79 | No | Naturally present in the environment |
| TTHMs [total trihalomethanes]–Stage 2 (ppb) | 2022 | 80 | NA | 51.4 | 37.4–66.0 | No | By-product of drinking water disinfection |
| Turbidity ² (NTU) | 2022 | TT | NA | 0.09 | 0.04–0.09 | No | Soil runoff |
| Turbidity (lowest monthly percent of samples meeting limit) | 2022 | TT = 95% of samples meet the limit | NA | 100 | NA | No | Soil runoff |

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | MCLG | AMOUNT DETECTED (90TH %ILE) | RANGE LOW-HIGH | SITES ABOVE AL/TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|--------------------------------|-----------------|-----|------|-----------------------------------|-------------------|----------------------------------|-----------|--|
| Copper (ppm) | 2022 | 1.3 | 1.3 | 0.0751 | ND–122.0 | 0/120 | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| Lead (ppb) | 2022 | 15 | 0 | 0 | ND–82.6 | 3/120 | Yes | Corrosion of household plumbing systems; Erosion of natural deposits |

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MFL (million fibers per liter): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.



SECONDARY SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | SMCL | MCLG | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|--------------------------------|-----------------|------|------|--------------------|-------------------|-----------|---|
| Fluoride (ppm) | 2021 | 2.0 | NA | 1.02 | 0.90–1.12 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |

UNREGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AMOUNT DETECTED | RANGE LOW-HIGH | TYPICAL SOURCE |
|--------------------------------|-----------------|--------------------|-------------------|--|
| PFAS | 02/03/2021 | NA | NA | Artificial chemicals applied to many consumer goods to make them waterproof, stain-resistant, or nonstick; Cosmetics; Fast food packaging; Firefighting foam |

¹The value reported under Amount Detected for TOC is the lowest ratio of the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

²Turbidity is a measure of the cloudiness of water and an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above, the Mahoning Valley Sanitary District's highest recorded turbidity result for 2022 was 0.09 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100 percent.

Notice of Violation

We were informed by the Ohio EPA that significant deficiencies were identified on June 19, 202_:

- (1) Management backflow prevention and cross-connection control
- (2) Management backflow prevention device testing
- (3) Management backflow prevention surveys and investigations
- (4) Management contingency plan
- (5) Plan approval for Liberty Street booster pump station

We have implemented the corrective action plan.

- (1) We have established and implemented our backflow prevention program.
- (2) We corrected the way backflow prevention devices were being tested and test all our facilities every year according to our program.
- (3) All surveys and investigations for Phase 1 have been implemented, and the few remaining places of interest will be completed by the end of 2023.
- (4) All requirements for a contingency plan have been sent in for approval and are awaiting response from Ohio EPA.
- (5) The Liberty Street booster pump station was disbanded in 2019 according to Ohio EPA orders (all information was sent to Ohio EPA and we are awaiting response for approval of work completed), and all work was completed by December 31, 2020, as prescribed by the Ohio EPA.

Violation Information

There were five exceedances of the action level for lead during the 2022 sampling period. All were resampled, and the second test came back below the detection limit. The problem was internal.

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit <http://bit.ly/3Z5AMm8>.